

SHOCK ISOLATION BEARINGS AND TRAVEL LIMIT GAPS IN A SPINDLE MOTOR AND DISK DRIVE USING THE SAME

ABSTRACT OF THE DISCLOSURE

Disclosed herein are disk drive spindle motors and disk drives using same that include one or more structures that function as travel limit stops that are designed to transfer the load created by a shock impulse to non-essential mechanical features and bypass the bearing structures, thereby keeping the load imposed thereon by the shock impulse below damaging levels. The spindle motor may also include one or more compliant members between the bearing structures and facing surfaces. Such compliant members may be combined with pre-load keepers that preload the bearings by axially compressing the compliant members.